

Chapter Two

The Department's Services and Their Capacity to Meet Texans' Health Needs

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The Sunset Advisory Commission Staff Report in 1998 concluded that the array of programs administered by the department was “staggering” and that they were administered without a coordinated approach or strategic direction. The *1997 TDH Self-Evaluation Report* concluded that one consequence of the lack of alignment among TDH's programs and services is that services are not available to the people of Texas where they live and work – in the local community. The *Self-Evaluation Report* said that the department cannot ensure that the essential public health functions exist for all of Texas (see Chapter One for a description of the essential public health functions).

In some areas, a select number of essential functions are performed and with only minimal effectiveness. In smaller communities, rural regions, and some inner city areas, citizens have inadequate access to appropriate health care services. Furthermore, when basic public health functions that protect and promote health are absent at both the local and state level, Texans face unnecessary health threats. As noted earlier, the department has a central role in the state's public health system, but it is only one of many state and local level entities that perform public health functions in Texas. The department must work within a broader public health system, a fact that makes coordination of duties and clarity of role within the department all the more crucial to ensure that statewide resources are maximized.

The *1997 Self-Evaluation Report* said that, in order to effectively protect and promote the health of Texans, the department must more clearly state its role and functions (particularly in relation to local partners), better identify which public health needs it will meet, and establish how it can coordinate and perform its functions more effectively.

In response to the Sunset report and the charge in HB 2085 (to “assess the services provided by the department and evaluate the need to continue those services in the future” (§11.0045(c)(6))), TDH conducted a detailed internal assessment of all its programs and operational units. [See Appendix C for a detailed summary of

the Internal Assessment.] The purpose of the internal assessment was to collect the information necessary to answer the driving question of the Sunset Advisory Commission: whether the health care system in the state has a clear strategic direction and a coordinated approach that maximizes health care and minimizes health risks. The internal assessment focused on clarifying the functions of the agency and identifying factors the department should address in order to align and coordinate TDH programs.

This chapter is based on the results of the Internal Assessment. The chapter provides a comprehensive description of TDH programs, their primary activities, and how they serve their primary customers; an evaluation of the need to continue programs; and an identification of challenges the department faces in aligning and coordinating programs.

TDH Internal Assessment: Justification and Methods

Over the last century, TDH gradually acquired the basic set of skills needed for monitoring and controlling diseases, preventing diseases through health education and promotion, linking people to needed health care services, and regulating and enforcing laws and policies that reduce health risks. These are the basic competencies of the public health. Today, TDH's many programs address a wide variety of public health threats and needs. As illustrated in Chapter One, the creation of TDH programs historically occurred in a program-by-program way, and not within a coordinated strategic plan. The Sunset Commission's report directed the department to examine and align its programs to improve their effectiveness.

Behind the Commission's report is an assumption – a very reasonable one — that if TDH programs operate without coordination, the agency is less able to carry out its mission of health protection and improvement. If TDH could better coordinate and align its programs, it could better serve the people of Texas.

In answering the Commission's charge, the department recognized that the first step toward better coordination and alignment of programs was a better understanding of the full scope of department activities and functions. To reach a better understanding, the department conducted an extensive assessment of all TDH programs. This assessment was the first complete review of TDH programs

conducted since the 1997 Self-Review that summarized program activities for the Sunset Advisory Commission's review of the agency.

All programs and offices of TDH were included in the program assessment. Personnel from the TDH Office of Policy and Planning, Executive Deputy Commissioner's Office, and the Deputyship for Health Care Financing conducted interviews on all 203 agency programs and offices, as well as seven regional offices. Interviewers collected information on history, purpose, and mission; resources (both funding and allocation); public health implications; and collaborations. The results of interviews were tabulated and summarized and are presented in Appendix C.

TDH Internal Assessment: Results

The assessment found that all programs' activities contribute to the performance of the essential public health functions or the health care safety net function, the two main responsibilities of the department. In order to further characterize TDH programs and activities, all TDH programs were placed into one of five descriptive categories based on the results of the assessment: Health Care Safety Net programs, Public Health Technical Expertise programs, Condition-Specific programs, Regulatory programs, and Administrative Offices. The description that follows articulates how programs in each category contribute to the department's two main responsibilities. Each category is described in terms of the primary focus or activity of its programs, although many programs conduct activities represented by more than one category. [See Attachment 1 of Appendix C for a program list by category with a brief statement of purpose for each program.]

Health Care Safety Net programs either *purchase* health services for eligible clients or *provide* health care services directly. There are 31 of these programs. Programs that purchase health services make payments to health care providers (via contracts) who treat individuals based on medically approved criteria. These programs serve Texans who are in specific eligible populations.

Health Care Safety Net programs serve individuals who are uninsured and medically indigent or have special health care needs. The safety net programs were instituted in the 1920s with the establishment of maternal and child health programs designed to reduce high infant and child mortality rates. Today, the 31

TDH safety net programs continue to primarily serve women and children and operate under a variety of eligibility rules, often based on federal Medicaid guidelines.

Public Health Technical Expertise programs are those that primarily perform or provide technical expertise in the essential public health functions. Thirty-seven such programs exist at TDH. Through these programs, the department performs and supports a variety of functions, including health monitoring and data management, surveillance and epidemiology (including laboratory services), health education and promotion, community mobilization, policy and planning, regulation and enforcement, linking people to community and personal health care, ensuring a competent workforce, evaluation, and research and innovation. Examples of these programs include Vital Statistics, Behavioral Risk Factor Surveillance System, Cancer Registry Division, Environmental Lead Program, Laboratory functions, Office of Policy & Planning, and Public Health Promotion.

These programs can operate collaboratively to great benefit. For example, surveillance activities can identify a community that has low rates of pre-school immunization for measles. At that point, the promotion and community mobilization programs can work with that community to increase awareness of the problem, explore possible local solutions, and develop and initiate activities to increase immunizations. These activities could include prevention and awareness efforts such as public service announcements, informational posters, and pamphlets distributed at doctors' offices, county fairs, and day care centers. The goal of these efforts is to increase the immunization rate and protect children from measles and other vaccine-preventable diseases. As awareness grows, local public health practitioners can mobilize health care providers and link them to children who need immunizations.

Condition-Specific programs apply the tools of public health to a specific topic; that topic is either a disease, medical condition, health risk, or a specific population's health. There are 33 Condition-Specific programs at TDH. Condition-Specific programs' activities primarily consist of population-focused prevention, education, or intervention efforts. Condition-Specific programs often utilize the full gamut of public health technical expertise and support functions to conduct their business. Examples of disease specific programs are Osteoporosis, Prostate Cancer, and

HIV/STD prevention programs. Examples of programs that focus on a specific health risk or population are the Abstinence Education program, the Fluoridation program, and the Public Health Nutrition program.

Condition-Specific programs serve the entire population of the state or specific target populations. These programs use their expertise about specific diseases or about the health problems of specific populations to study disease trends and initiate protective functions, to inform and educate the people, and to link people to needed medical services.

Also included in the category of Condition-Specific programs are those programs that primarily link people to specific health care services. Among these are programs that provide case management (such as Pregnant Women and Infants, Children with Special Health Care Needs, and Texas Health Steps), Medical Transportation program, and the Baby Love Hotline for information and referral. These programs were included in this category because their primary activity is to perform one of the essential public health functions (linking people to necessary health care services) and because their focus is on the health problems of specific populations. Since they provide this service to individuals who are eligible, this subset of Condition-Specific programs can effectively collaborate with Health Care Safety Net programs.

Regulatory programs work to ensure protection of the public's health by enforcing applicable laws and rules set forth by the Legislature and the Board of Health. Forty-one of these programs exist at TDH.

The primary role of regulatory programs is to identify, monitor, and prevent known health hazards, an essential part of public health. In addition to the role of regulator, these programs provide technical assistance and support to promote compliance with the laws and policies of the state. Regulatory programs provide licensure, certification, registration, and regulation of certain health *professionals*, certain *facilities* that provide health care services, food, medical, other *product* manufacturing and sale, and *environmental* hazards. Programs that regulate facilities, products, and environmental factors focus on a type of hazard or known health risk that can be prevented; examples include Hospital Licensing, Ambulatory

Surgical Center Licensing, Drugs and Medical Devices, Milk and Dairy Products Division, General Sanitation, Asbestos Program, and Environmental Lead. The programs that regulate professionals ensure enforcement of professional standards for those who provide health care services, helping to prevent health risks associated with inadequate care and unqualified practitioners.

Regulatory programs have varying degrees of authority, from providing a registry for professional groups, to the certification of health facilities and product manufacturers, to enforcing the law by closing non-compliant facilities. In some cases, TDH regulatory programs share regulatory authority with other state agencies or local health officials.

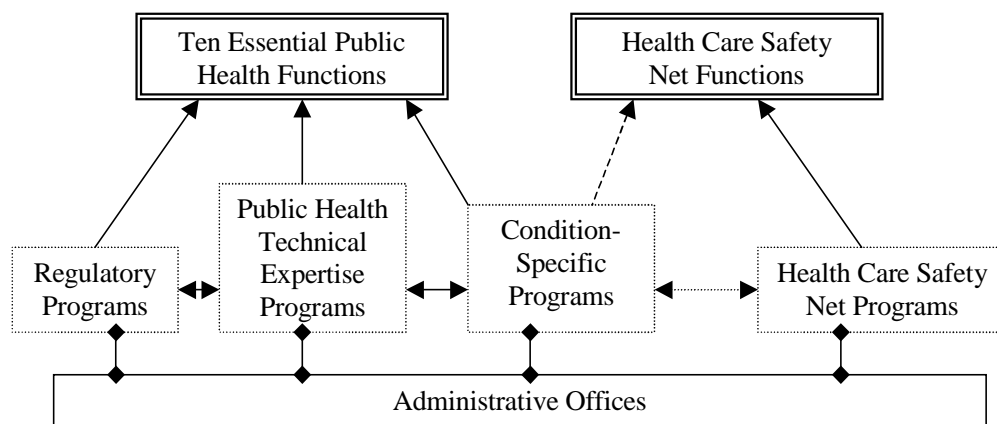
The work of TDH regulatory programs affects the lives of everyday Texans by enforcing laws and regulations involving a wide variety of human activities: operation of restaurants, operation of health care facilities, meat and dairy production, and many others. The protective functions of these programs may reach far beyond Texas by regulating the manufacture and distribution of products for exports.

Finally, there are **Administrative Offices**, without which the department's programs could not operate. Sixty-one administrative offices support internal agency functions. Administrative units also exist in most of the programs mentioned in the previous four categories. The activities in all these offices include financial support activities such as budget management, contract management, purchasing, and human resource management.

Contributions of Programs to TDH Responsibilities

Figure 2-1 represents the contributions that each category of programs makes to the two primary responsibilities of the department, the essential public health functions and the health care safety net functions. The complexity of the interactions among the program categories in this figure is indicative of the various ways that the many programs work together to meet the department's responsibilities. The arrows from the category of programs to the functions indicate the primary contribution of each category to each function. The dashed line from Condition-Specific programs to the Health Care Safety Net function represents the role some Condition-Specific programs play in linking people to health care

Figure 2-1. Contributions and interactions of program categories in support of TDH's main responsibilities.



services. The permeable lines around each category of programs and the arrows between them indicate the potential for collaboration and integration of functions. In the figure, the administrative offices support all types of programs.

Evaluating the Need to Continue Services in the Future

HB 2085 required the department to evaluate the need to continue providing its services in the future. It has been noted in Chapter One that the current set of functions of the department (and the over 200 programs associated with those functions) have emerged over time to protect and promote the health of the citizens of Texas. The “need” for these programs has varied. In the early part of the 20th century, the imperative was to control infectious diseases like smallpox and yellow fever. Now, in the 21st century, the priorities of the department have changed. For example, a program against smallpox has not been needed since 1977, when the disease was declared eradicated from the Earth. Similarly, a program against yellow fever is no longer needed, because the disease no longer poses a threat to Texans. In the future, TDH may be able to drop its programs against measles and other diseases as the threats posed by these diseases disappear. Someday, perhaps, TDH will no longer need programs against childhood dental problems, Alzheimer’s disease, and teen pregnancy. It is possible to imagine a Texas where these problems no longer threaten the health of the state.

For other programs, however, an end is difficult to see. The incidence of some sexually transmitted diseases, for example, has greatly decreased in recent decades. Syphilis is now almost rare – only about 450 cases of syphilis were reported in

Texas in 1999, compared to about 5,000 in 1991. But public health research suggests that programs against sexually transmitted diseases cannot be easily discontinued. In the past, when these programs were cut, the diseases re-emerged. Tempting as it may be to curtail resources devoted to such programs, they must be maintained.

For some other public health problems facing Texans, the battle has just begun and new programs will be needed. A good example is childhood obesity. In the United States, the prevalence of childhood obesity has risen from about five percent in the 1960s to nearly 15 percent in the latest surveys. In Texas, no good data exist on the prevalence of childhood obesity, but a recent increase in the incidence of Type II diabetes mellitus in children suggests that obesity may be on the rise.

TDH has taken steps to address this new threat to the public health. The agency is spending over one hundred thousand dollars of tobacco settlement funds on grants to determine the prevalence of obesity in various Texas child populations. As a clearer picture of childhood obesity emerges from these and other studies, it is possible, indeed likely, that the agency will need to direct additional resources toward this problem.

As mentioned in Chapter One, gains against public health problems in the 21st century will be achieved mainly through modifications in individual lifestyles – improved nutrition, exercise, reduction in smoking and alcohol use, control of stress – and changes in the conditions of communities. Chronic diseases like coronary heart diseases, stroke, and some cancers are all linked to behavior. In future years, TDH will be obliged to increase its attention to these problems. In order to do so, the agency must be able to reprioritize its financial and staff resources.

As discussed earlier, part of TDH's dilemma is that its program structure was created piecemeal, mostly by the state or federal governments. Once created, programs developed natural constituencies, both outside and inside the agency. Now, as new health threats manifest themselves and older threats recede, the agency should, ideally, be able to respond by shifting resources away from programs of lower public health risk into programs of greater public health risk.

But, shifting resources within the agency is a difficult task. At the outset, the agency faces administrative hurdles when it attempts to shift resources, such as federal funding rules and categorical funding, although these can often be overcome by persistent administrative effort. More importantly, the natural constituencies of existing programs often resist such reprioritization efforts.

The Sunset Commission recognized that a lack of alignment and coordination among TDH programs detracts from the overall effectiveness of the agency. The Internal Assessment found that some TDH programs often operate virtuously autonomously and are sometimes unaware of how their activities fit into the larger objectives of the agency. As a result, when TDH recognizes that it must address new health threats, reprioritization becomes all the more difficult to implement and manage.

TDH must find ways to better align its programs toward an overall strategic direction of the agency. While no large human organization like TDH can ever operate as a fully unified and coordinated organism, TDH can take steps to better connect its programs together.

Providing the Right Set of Services

The Sunset Advisory Commission asked the department to evaluate whether it is providing “the right set of services.” In other words, *are the department’s programs appropriately matched to the public health needs of the state?* The Internal Assessment mentioned in this chapter can help answer this question by determining in detail what services TDH is now providing. But the question also demands an assessment of the health needs of the state.

Health needs can be defined in a number of ways. Traditionally, needs have been defined by examining what diseases and conditions are adversely affecting health. In the public health sphere, this examination uses measures such as mortality, morbidity, and quality of life. In the realm of individual health care services, the examination uses measures such as insurance status, access to the health care system, and satisfaction with care.

Ultimately, the goal of all health agencies is to reduce suffering and premature death and to increase the general level of health in a population. To do this in the most effective way, an agency must array its resources so that they are applied

against those diseases that cause the most death and suffering. In an ideal public health world, an agency would match its resources very closely to the particular health threats faced by the population it serves. If, for example, it were known that smoking constituted x percent of the health threat facing a population, the agency would devote roughly x percent of its efforts toward reducing smoking, adjusted for such factors as the preventability of smoking, the time lag between resource allocation and results, measurability of outcomes, cost-effectiveness of prevention activities, and others.

No health agency, however, operates in such an ideal world. The set of services provided by health agencies is almost never the result of a rational contemporary calculation of the health threats facing a population. In Texas, services are determined by a mix of federal priorities, historical funding streams, the priorities of TDH, and the wishes of the Legislature and its constituents. Federal priorities bring large grants to Texas from the federal government that address a wide variety of national health priorities. At the state level, TDH communicates its needs to the Legislature through budget requests, testimony to legislative committees, and conversations with individual legislators and constituents. Legislators and interest groups add their own interpretations of need. The result of this process is driven not by the strict magnitude of threats facing Texans, but by a mix of influences that are scientific, social, economic, ideological, and political.

What would the mix of TDH services look like if they were ordered solely on the basis of health risks facing Texans? The answer depends, of course, on the measure used to define health risks. If simple mortality were the measure used, TDH would devote the largest portion of its resources to the prevention of heart disease. Diseases of the heart are the primary cause of mortality in Texas, accounting for 30% of all deaths. In reality, however, TDH devotes only a small portion of its resources to the prevention of heart disease.

Another way to define the health risks would be “years of productive life lost (YPLL).” YPLL represents the number of years of life lost by members of a population due to particular causes. A person who dies at a young age generates more YPLL than a person who dies at an old age. If YPLL were used to define the health risks facing Texans, the mix of services at TDH would tilt strongly toward the prevention of injuries. In Texas, the largest cause of YPLL is injuries, because injuries occur frequently in young persons.

But no one expects TDH or any health agency to order its resources solely on the basis of health threats. In a democratic society, the prioritization of government health activities does not depend solely on epidemiological calculations. Furthermore, in the realm of public health, resources should not be directed toward even the greatest public health threats unless good methods exist to prevent them. For example, while cancers are a major cause of morbidity and mortality in our society, for some types of cancer, no good specific preventive measures exist.

Cost-effectiveness is another consideration. Few government agencies will ever have enough resources to carry out every useful program to the maximum degree. TDH and its overseers will always need to prioritize the use of the resources available. In public health, cost-effectiveness analysis is a powerful tool that can be used to get the “greatest bang for the buck.” By using cost-effectiveness analysis, activities can be ordered by their utility per dollar spent, and those with the highest cost-effectiveness can be preferred. But TDH has not used this type of analysis to prioritize agency-wide spending.

TDH now provides the set of services required by state legislation and a wide array of federal grants. But it is unclear whether this set is the “right” one. Although TDH routinely measures and publishes key data on mortality and morbidity in Texas, such as causes of death, infectious disease, cancer incidence, teen pregnancy, prevalence of risk factors for disease, and others, to date the agency has not conducted a detailed comprehensive analysis of the public health threats facing the Texas communities. Such an analysis is needed. It should be based on a careful review of the diseases affecting Texans, the conditions and health behaviors that lead to these diseases, and the individual and community dynamics that lead to these conditions and behaviors. Then TDH must begin a gradual process of rationalizing the allocation of its current resources, focusing on cost-effectiveness whenever possible. To do this, TDH must put more resources into epidemiological and policy analysis.

For individual health care services (i.e., the health care safety net), TDH can assess need in several ways. One way is to examine state morbidity and mortality data for clues about the incidence of preventable diseases. One classic indicator is the death rate from cervical cancer. This disease is fully preventable, and it is often viewed as a rough indicator of the failure of preventive care. In Texas, the rate of

cervical cancer death for 1990-1994 was 3.4 per 100,000, slightly higher than the national rate of 2.9 per 100,000 (American Cancer Society statistics). Another measure often used as a general indicator of health in a population is the infant mortality rate. The Texas infant mortality rate for 1995-97 was 6.4 per 1,000 live births, compared to 7.4 for the United States (National Center for Health Statistics). The health care safety net can also be assessed through direct measures of access and self-reported health status. TDH conducts periodic survey of these items, mostly through the Behavioral Risk Factor Surveillance System, a federally funded program. The survey is a random-digit-dial telephone survey designed to provide statistically sound estimates of behavior risk factors in populations. For example, in the 1997 survey, Texans reported that, on average, their health had been “not good” for 3.2 of the previous 30 days, compared to a median of 3.1 days for the nation as a whole.

Where TDH finds mismatches between its current efforts and the needs of the Texas population, it can take several actions. In most cases, before corrective action can be taken, TDH must collect more information on the nature and magnitude of the need and make an assessment of the agency’s ability to fulfill it. When the need is better understood, TDH can respond by reprioritizing resources internally or by communicating the need to the federal government or state legislature, which may make additional resources available.

Better Aligning TDH Programs

The internal assessment pointed to a number of challenges that limit the department’s ability to coordinate and align its programs and services. The areas that will require attention to better align TDH programs are streamlining administrative systems, improving the assessment of health information to identify priorities, coordinating planning to increase effectiveness of program implementation, and conducting program evaluation linked to health priorities of the agency. Together, these challenges limit the department’s ability to adapt to new health priorities.

Foremost among these, important health data and information-gathering mechanisms do not exist or are not effectively utilized, especially at the local level. Without better data about health status, local communities and state leaders cannot effectively prioritize and address health issues. For example, no data are

available at the community level for the prevalence of behaviors that underlie a number of killer diseases in Texas. No data exist on obesity, sedentary lifestyle, nutritional habits, smoking, etc. at a level smaller than the whole state. Without such data, it is difficult for communities to assess their health situations and take local action. Local data motivate communities; statewide data usually do not.

TDH must: (1) find ways to provide data on health status that are relevant at the local level, (2) improve its ability to aggregate and report local data back to communities; (3) improve the quality and relevance of data (for example, by adding the ability to conduct geographic information system analysis); and (4) move to assess the health outcomes of disease intervention and safety net programs.

TDH must also examine the way it collects and analyzes data. Many data collected by TDH are gathered in isolation. That is, much of the data collected by programs is focused solely on the services those programs provide. Opportunities to collect broader information may be lost. Past efforts to coordinate these data collection efforts have met major barriers. For example, in some cases, the rules and policies that govern the provision of services limit the information that can be gathered.

The department is also hindered by insufficient resources to assess health information to address health priorities. The department's capacity to assess incoming data must be strengthened. At the same time, the capacity of local authorities to collect and interpret epidemiologic data must be improved.

Finally, the department must continue on a course toward better measurement of health outcomes. Currently, the department has no consistent mechanism to gauge the health impact of its programs. Some TDH programs do not attempt to assess the actual impact of their activities on health status. In the Internal Assessment, many programs described their evaluation component only in terms of the level of customer satisfaction or dissatisfaction, with no attention to the impact on health outcomes. For some programs, assessments of health status impact are not feasible. For others, such assessments are not only feasible but should be done as soon as possible in order to judge whether the programs are making people healthier.

As TDH designs a plan to more effectively deploy resources (per the Sunset Commission's request), it must include a means of assessing the impact of its

programs. The department must collect baseline data against which performance and changes in health outcomes can be measured.